

Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-669

Name: Fiber Alley over Fiber River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u>X</u>	Eligibility Not Recommended _____
Criteria: <u> </u> A <u> </u> B <u>X</u> C <u> </u> D Considerations: <u> </u> A <u> </u> B <u> </u> C <u> </u> D <u> </u> E <u> </u> F <u> </u> G <u> </u> None	
Comments: _____	

Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

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Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number HO-669

Name and SHA No. Tiber Alley over Tiber River/HO 107

Location:

Street/Road Name and Number: Tiber Alley

City/Town: Ellicott City Vicinity _____

County: Howard

Ownership: __ State X County __ Municipal __ Other

This bridge projects over: __ Road __ Railway X Water __ Land

Is the bridge located within a designated district: X yes __ no

__ X NR listed district __ NR determined eligible district

__ locally designated __ other

Name of District Ellicott City National Register Historic District

Bridge Type:

__ Timber Bridge

__ Beam Bridge __ Truss-Covered __ Trestle __ Timber-and-Concrete

__ Stone Arch

__ Metal Truss

__ Movable Bridge

__ Swing __ Bascule Single Leaf __ Bascule Multiple Leaf

__ Vertical Lift __ Retractable __ Pontoon

X Metal Girder

__ X Rolled Girder __ Rolled Girder Concrete Encased

__ Plate Girder __ Plate Girder Concrete Encased

__ Metal Suspension

__ Metal Arch

__ Metal Cantilever

__ Concrete

__ Concrete Arch __ Concrete Slab __ Concrete Beam __ Rigid Frame

__ Other Type Name _____

Description:**Describe Setting:**

Bridge HO 107 carries Tiber Alley over the Tiber River in Ellicott City, Howard County, Maryland. Tiber Alley runs in a generally north-south direction at this location; the Tiber River runs generally east-west. The bridge is located in a small town with nineteenth-century domestic, commercial and industrial structures surrounding it. An adjoining nineteenth-century clapboard and stone structure serves as the east wall of the bridge, in place of a guardrail.

Describe Superstructure and Substructure:

The superstructure of HO 107 is a single span rolled steel beam structure constructed in 1935. The bridge has a span length of 34 feet, and an overall length of 38 feet. The bridge has a corrugated metal deck with a bituminous overlay. It has a metal guardrail on the west elevation. Bridge HO 107 has a clear roadway width of 16.66 feet, and an out-to-out width of 17 feet. The bridge has a sufficiency rating of 69.9.

The substructure is actually a channelized wall for the Tiber River, which has been channeled in this area. The cut stone used for this retaining wall is the same as that used in the construction of the surrounding structures. Therefore, it is highly likely that this wall's construction dates to the early-nineteenth century time period of the adjoining structures.

Discuss Major Alterations:

In 1984 the corrugated metal deck was replaced and the steel stringers were strengthened.

History:

When Built: 1935, deck replaced 1984

Why Built: Structure HO 107 was constructed to meet local transportation needs.

Who Built: Unknown

Why Altered: Structure HO 107 was altered to meet structural and safety needs.

Was this bridge built as part of an organized bridge building campaign: yes

Surveyor Analysis:

This bridge may have NR significance for association with:

☐ A Events ☐ Person
☒ C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history?

There has been a bridge of some type at this crossing of the Tiber River since the construction of the surrounding structures in the early-nineteenth century. Tiber Alley serves as an access road to approximately five structures. It is likely that a bridge was built here in direct response to the need for access to and from the newly constructed structures in the early-nineteenth century; or, a bridge was erected here to allow for construction of the structures on the other

side of the Tiber River. HO 107 is likely an early-twentieth-century replacement of a much earlier structure. In the early-twentieth century many less stable timber and stone structures were replaced with more stable steel beam bridges, capable of carrying much heavier traffic, such as automobiles and trucks. It is probable that HO 107 is a typical example of this surge of replacements in Howard County.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

It is not likely that construction of, or alterations to, HO 107 had a significant impact on the growth and development of the area because this bridge is an early-twentieth century replacement of an earlier structure. However, construction of the original structure certainly would have had a significant impact on the development of the area.

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district:

HO 107 is located in the Ellicott City National Register Historic District. Though the bridge post-dates the period of construction of the most of the district, the bridge blends in with the historic landscape, and does not detract from the visual or historic character of the district.

Is the bridge a significant example of its type?

Bridge HO 107 is a unique example of a steel beam bridge. The stone masonry walls of the channeled Tiber River act as the abutments for the bridge. The east side of the bridge rests on, but is not supported by, the iron supports of an adjoining stone and clapboard structure, the center of which spans the Tiber River as well. The unique engineering and construction features, combined with the fact that the alterations made to this bridge since 1935 have not been major structural repairs, cause this bridge to be considered a unique, and therefore significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Longitudinal I-beams are considered a primary character defining element. There is no record in the county bridge inspection files of these beams ever having been replaced. However, it is noted that in 1984 the steel stringers were strengthened for structural support.

The bridge deck is considered a secondary character defining element. The county inspection files note that the corrugated metal deck was replaced and a new bituminous overlay was put down in 1984. It is probable that similar repairs have been made in the past, as well as cleaning, painting and guardrail replacement, although no record of that appears in the inspection reports.

Stone masonry abutments are considered primary character defining elements. Bridge HO 107 rests on stone masonry retaining walls. While not the typical style, these retaining walls act as abutments for the bridge. The retaining walls were put in when the Tiber River was channeled, sometime in the early-nineteenth century.

Bridge HO 107 is currently in good condition. Repairs that have been made to the structure have been relatively minor or replacements in kind. The fact that the original substructure and the unique construction techniques have not been changed dramatically over the course of the last 100 plus years, leads to the conclusion that the bridge does retain a certain amount of integrity of the elements described in the Context Addendum.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why:

Yes, this bridge is a significant example of the work of the designer or engineer.

Should this bridge be given further study before significance analysis is made and why?

No, this bridge does not need to be given further study.

Bibliography:

Howard County Bridge Inspection Files

Spero, P.A.C. & Company, and Louis Berger & Associates **Historic Bridges in Maryland:
Historic Bridge Context**, September 1994.

Surveyor:

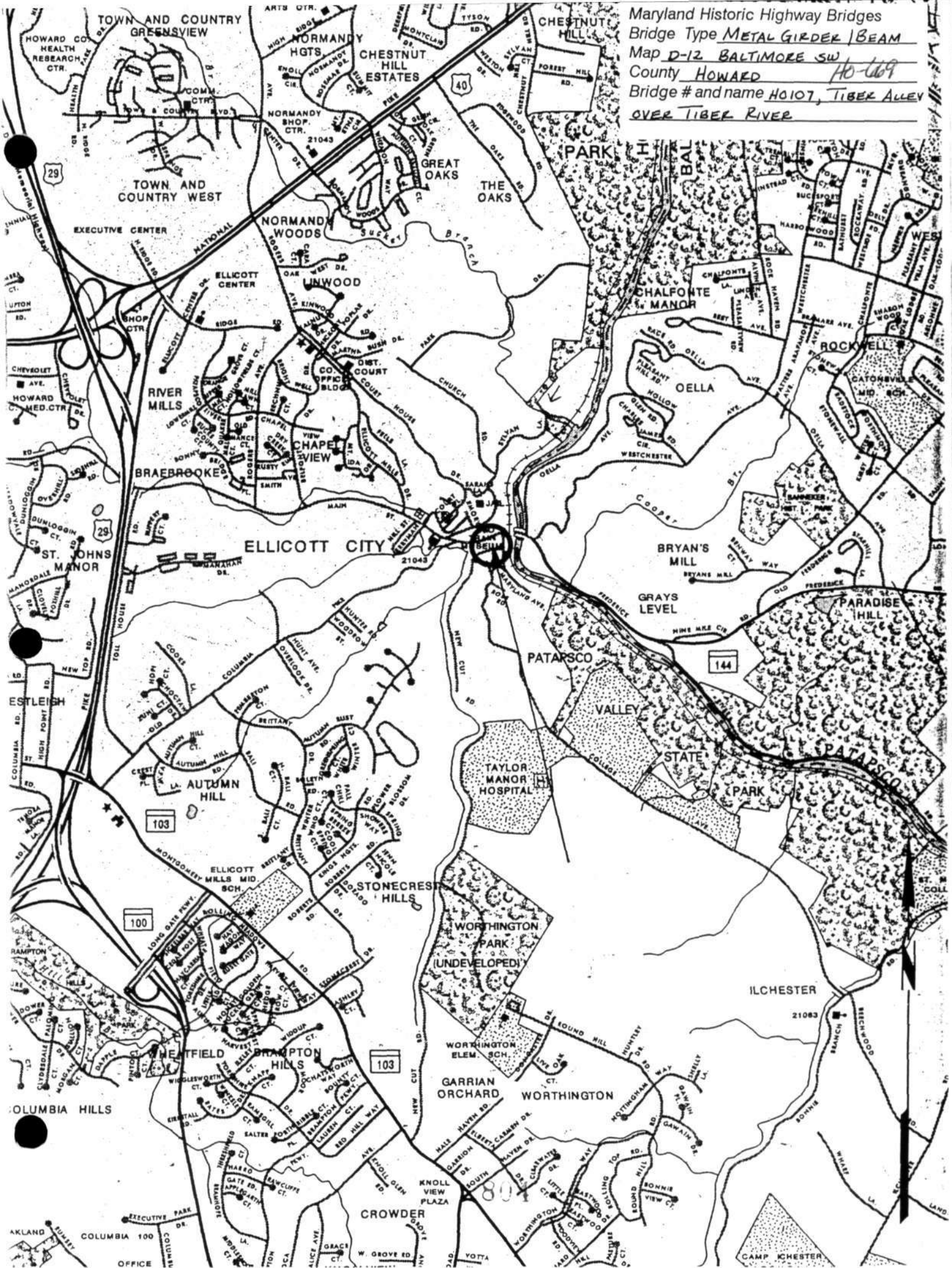
Name: Stephanie L. Bandy **Date:** August 1995

Organization: State Highway Admin. **Telephone:** (410) 321-2213

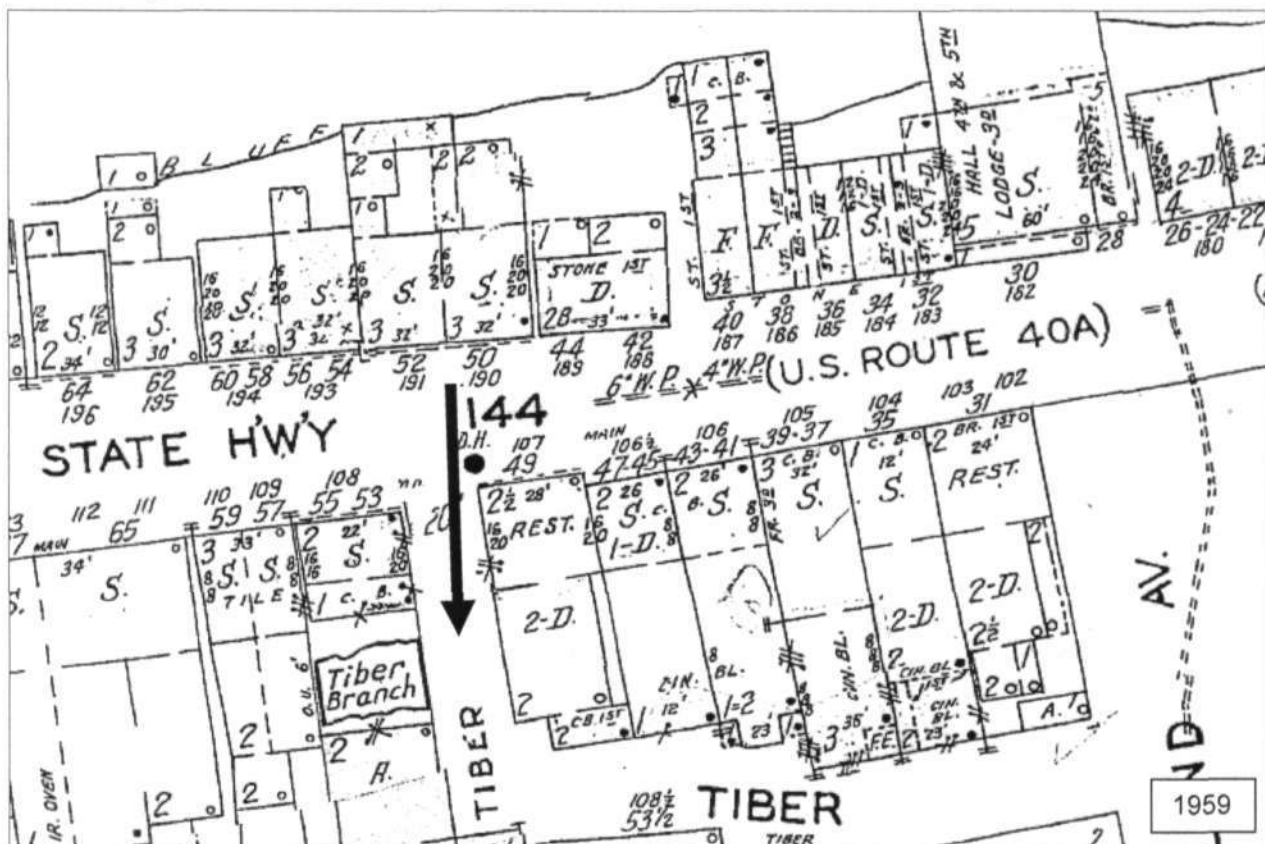
Address: 2323 West Joppa Road Brooklandville, MD 21022

Revised by P.A.C. Spero & Company, July 1998

Maryland Historic Highway Bridges
 Bridge Type METAL GIRDER / BEAM
 Map D-12 BALTIMORE SW
 County HOWARD HO-669
 Bridge # and name HO107, TIBER ALLEY
OVER TIBER RIVER



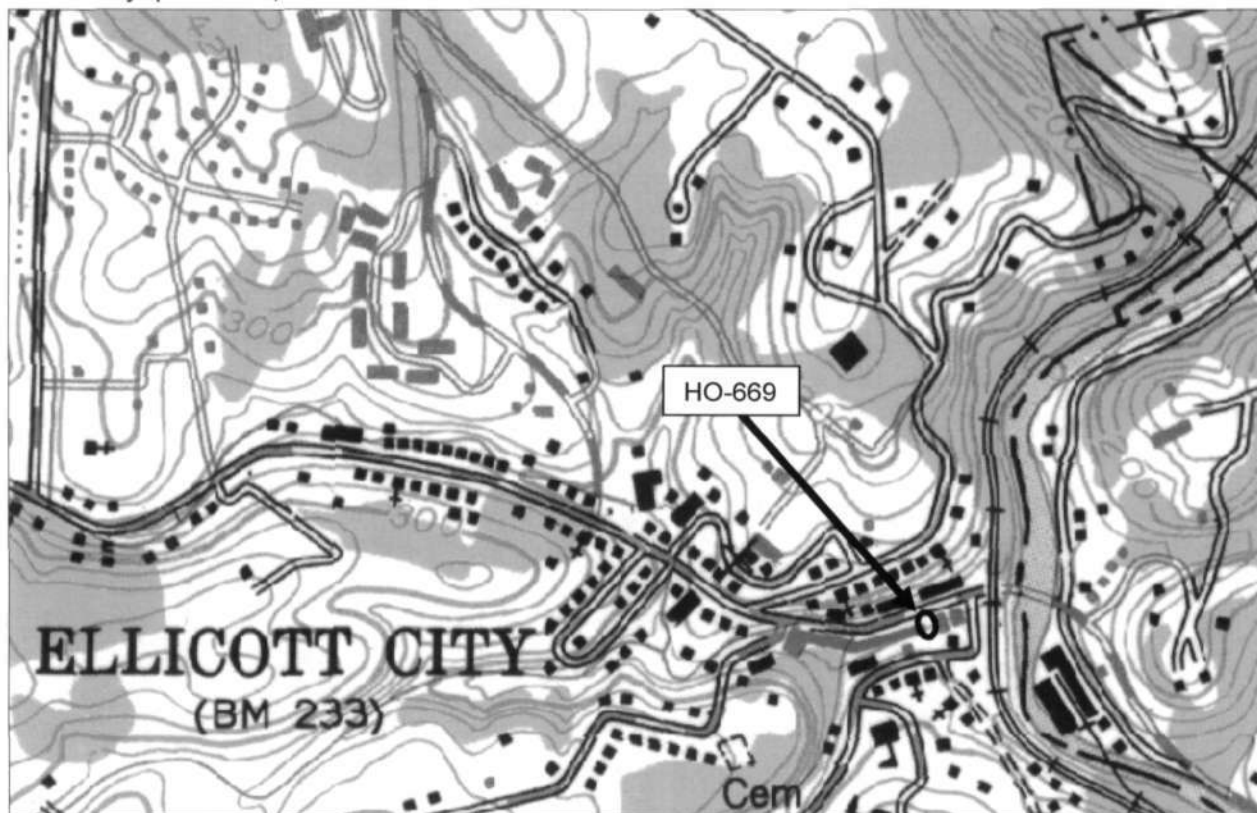
Bridge (SHA HO-107), Tiber Alley over Tiber River, Ellicott City
Sanborn Map



HO-669

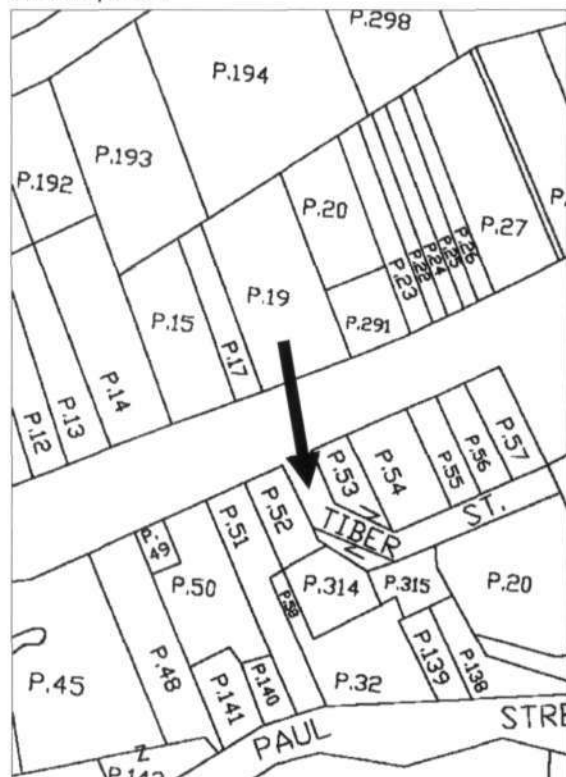
Bridge (SHA HO-107), Tiber Alley over Tiber River, Ellicott City

Ellicott City quad 1953, Photorevised 1966 and 1974



Tax Map 25A

National Web Map Service 6" Orthophoto Map, c. 2010



HO-669

Bridge (SHA HO-107), Tiber Alley over Tiber River, Ellicott City

Photos by Jennifer K. Cosham, 12/5/2012

Facing south



Facing north





WEIGHT
LIMIT
30 000
POUNDS

STOP

Inventory # HO-669

Name HO107-TIBER ALLEY OVER TIBER RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING

NORTH

Number 1 3
8 of 36

1196 95512010 4 010



ONE WAY

H

H

H

H

SIDE STREETS

SIDE STREETS

123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100

SIDE STREETS

SUNDAY BRUNCH

Inventory # H0-669

Name H0107-TIBER AWAY OVER TIBER RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

Number 2 of 3



Inventory # HO-669

Name HD107-TIBER ALLEY OVER TIBER RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description EAST ELEVATION LOOKING

NORTHWEST

~~#3~~ 3
Number 7 of 30

2000 10 10 10 10 10 10 10 10 10 10